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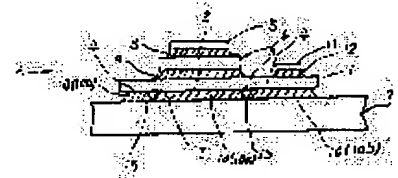
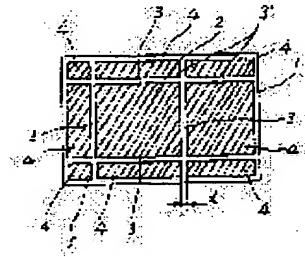
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## (54) INSULATING PLATE FOR SEMICONDUCTOR DEVICE

## (57)Abstract:

**PURPOSE:** To suppress generation of the void and cracks in a junction part with a heat sink by arranging a second metallized surface about a first metallized surface through a slit part and extending at least one part of the slit part up to an end surface of an insulating plate.

**CONSTITUTION:** A first metallized surface 2 is formed directly under a semiconductor element mounting position in an insulating plate 1. Further, a not metallized slit part 3 is secured around the metallized surface 2 having pattern constitution, in which a second metallized surface 4 is arranged around the metallized surface 2 through this slit part 3. Then, each slit part 3' is that, in which the slit part 3 is rectilineally extended up to every end face of the insulating plate 1 respectively. In the junction part 10 between the insulating plate 1 and the heat sink 7, cracks are likely to be generated from the second junction part (corresponding to the metallized surface 4) 10b located in one end and four corners of the insulating plate 1, when a long thermal fatigue cycle is applied. However, when the cracks reach a slit-shaped non-junction part, a notch effect of the cracks vanishes so as to stop the advance of cracks.



## LEGAL STATUS

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